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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/609,184	06/26/2003	Thomas M. DePierri	7144-1	7636

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EXAMINER	
LOWE, MICHAEL S	

ART UNIT	PAPER NUMBER
3652	

DATE MAILED: 09/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/609,184	DEPIERRI, THOMAS M.	
	Examiner	Art Unit	
	M. Scott Lowe	3652	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on *20 June 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15 and 24-49* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15,24-49* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *26 June 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 24 is rejected under 35 U.S.C. 102(b) as being anticipated by DCL (RPT24 Rotary Product Trimmer RPT-10001).

Re claim 24, the DCL reference teaches a bulk material loading device, comprising:

(a) an upper casing assembly (not numbered) having inlet means for receiving a bulk material;

(b) a motor (not numbered) having a shaft and a motor housing (not numbered), wherein said motor housing is mounted to said upper casing assembly outside of said inlet means;

(c) an impeller (trimmer) in rotational communication with said shaft of said motor, wherein said impeller is aligned beneath said inlet means

(d) level sensing means (high level notes of section B-B) operatively positioned below said impeller for sensing an accumulation of said bulk material in a container when said bulk material in said container is at a predetermined height above an operative level of said level sensing means.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 8,10,26,33,35,37,38,40, are rejected under 35 U.S.C. 103(a) as being unpatentable over DCL (RPT24 Rotary Product Trimmer RPT-10001) in view of Berquist (US 5,393,189).

Re claim 8, the DCL reference teaches a bulk material loading device, comprising:

(a) an upper casing assembly (not numbered) having inlet means for receiving a bulk material;

(b) a motor (not numbered) having a shaft and a motor housing (not numbered), wherein said motor housing is mounted to said upper casing assembly outside of said inlet means;

(c) an impeller (trimmer) in rotational communication with said shaft of said motor, wherein said impeller is aligned beneath said inlet means, wherein said impeller comprises an upper portion and a lower portion, wherein said lower portion includes a plurality of vanes (blades) adapted to disperse said bulk material, and wherein said upper portion includes a surface formed to direct said bulk material into said plurality of vanes.

The DCL reference does not teach an upper impeller portion being vane-less. However, Berquist teaches an upper impeller portion being vane-less and states that it is generally desirable for all types of material handlers to minimize particle fracturing by decreasing the velocity of the particles (column 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified DCL by the general teaching of Berquist to have an upper impeller portion being vane-less in order to minimize particle fracturing by decreasing the velocity of the particles prior to impact with the vanes of the lower impeller.

Re claims 10,33,38, the DCL reference teaches level sensing means operatively positioned below said impeller (material guide) for sensing an accumulation of said bulk material.

Re claim 26, the DCL reference teaches said impeller comprises an upper portion and a lower portion, wherein said lower portion includes a plurality of vanes adapted to disperse said bulk material, and wherein said upper portion includes a surface formed to direct said bulk material into said plurality of vanes. The DCL reference does not teach an upper impeller portion being vane-less. However, Berquist teaches an upper impeller portion being vane-less and states that it is generally desirable for all types of material handlers to minimize particle fracturing by decreasing the velocity of the particles (column 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified DCL by the general teaching of Berquist to have an upper impeller portion being vane-less in order to

minimize particle fracturing by decreasing the velocity of the particles prior to impact with the vanes of the lower impeller.

Re claims 35,40, the DCL reference teaches the level probe protected within a well having an inlet port and bottom opening.

Re claim 37, the DCL reference teaches bulk material loading device, comprising:
(a) an upper casing assembly having inlet means for receiving a bulk material;
(b) a material guide (trimmer), positioned below said inlet means, having a surface capable of deflecting said bulk material; and
(c) level sensing means (section B-B) operatively positioned below said material guide for sensing an accumulation of said bulk material in a container when said bulk material in said container is at a predetermined height above an operative level of said level sensing means.

Claims 1-5,9,11-13,25,28-30, are rejected under 35 U.S.C. 103(a) as being unpatentable over DCL (RPT24 Rotary Product Trimmer RPT-10001) in view of Krambrock (US 5,660,215).

Re claim 1, the DCL reference teaches a bulk material loading device, comprising:
(a) an upper casing assembly (not numbered) having inlet means for receiving a bulk material;

(b) a motor (not numbered) having a shaft and a motor housing (not numbered), wherein said motor housing is mounted to said upper casing assembly outside of said inlet means;

(c) an impeller (trimmer) in rotational communication with said shaft of said motor, wherein said impeller is aligned beneath said inlet means.

DCL does not appear to teach a movable shutter assembly.

Krambrock teaches a shutter assembly 3,12, wherein said shutter assembly is movable between a closed position preventing said device from dispersing said bulk material and an open position permitting said device to disperse said bulk material in order to control the dispersal characteristics of the bulk material (column 4, paragraphs 3-4). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified DCL by the general teaching of Krambrock to have a movable shutter assembly in order to control the dispersal properties of the bulk material and also because it is clear form the DCL reference that there is intended to be a way for the material to be stopped and conveyed (high level notes of section B-B). Since DCL's impeller is operatively connected between said motor housing and said upper casing assembly the shutter modification would also be operatively connected between said motor housing and said upper casing assembly.

Re claim 2, the DCL reference teaches level sensing means operatively positioned below said impeller for sensing an accumulation of said bulk material.

Re claims 3,11,28, the DCL reference as modified in claim 1 teaches said shutter assembly comprising:

(a) a cylindrical shutter 13 having an upper rim and a lower rim; and

(b) a shutter flange (not numbered) extending radially from said shutter.

Re claims 4,12,29, the DCL reference as modified in claim 1 teaches a motor housing including a shutter contact surface formed to contact said shutter assembly in a closed position and retain residual bulk material inside said device.

Re claims 5,13,30, the DCL reference as modified in claim 1 teaches said upper casing assembly comprises lifting means operatively in contact with said shutter assembly for at least partially opening said shutter assembly to permit the release of residual bulk material from said device.

Re claims 9,25, DCL does not appear to teach a movable shutter assembly.

Krambrock teaches a shutter assembly 3,12, wherein said shutter assembly is movable between a closed position preventing said device from dispersing said bulk material and an open position permitting said device to disperse said bulk material in order to control the dispersal characteristics of the bulk material (column 4, paragraphs 3-4). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified DCL by the general teaching of Krambrock to have a movable shutter assembly in order to control the dispersal properties of the bulk material and also because it is clear form the DCL reference that there is intended to be a way for the material to be stopped and conveyed (high level notes of section B-B). Since DCL's impeller is operatively connected between said motor housing and said upper casing assembly the shutter modification would also be operatively connected between said motor housing and said upper casing assembly.

Claims 6,7,14,15,31,32, are rejected under 35 U.S.C. 103(a) as being unpatentable over DCL (RPT24 Rotary Product Trimmer RPT-10001) in view of Krambrock (US 5,660,215) and further in view of Gentilcore (US 5,052,451).

Re claims 6,14,31, the modified DCL reference does not teach multiple lifting actuators. Gentilcore teaches a plurality of lifting flanges, and wherein said lifting means comprises a plurality of lifting actuators operatively in contact with lifting flanges 22,26,42, etc., in order to raise or lower a shutter 16. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the DCL reference by the general teaching of Gentilcore to have a plurality of lifting flanges, and wherein said lifting means comprises a plurality of lifting actuators operatively in contact with lifting flanges in order to raise or lower a heavy shutter in an level manner.

Re claims 7,15,32, as modified in reference to claim 6, DCL reference teaches pneumatic lifting actuators.

Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over DCL (RPT24 Rotary Product Trimmer RPT-10001) in view of Felix (US 3,469,718).

Re claim 27, the DCL reference teaches a bulk material loading device, comprising:

(a) an upper casing assembly (not numbered) having inlet means for receiving a bulk material;

(b) a motor (not numbered) having a shaft and a motor housing (not numbered), wherein said motor housing is mounted to said upper casing assembly outside of said inlet means;

(c) an impeller (trimmer) in rotational communication with said shaft of said motor, wherein said impeller is aligned beneath said inlet means and having a plurality of vanes (blades).

DCL does not appear to teach vanes oriented at a non-zero angle with respect to the vertical. Felix teaches vanes oriented at a non-zero angle with respect to the vertical in order to assure even filling (column 2, line 68). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified DCL by Felix to have vanes oriented at a non-zero angle with respect to the vertical in order to assure even filling.

Claims 34,36,39,41 are rejected under 35 U.S.C. 103(a) as being unpatentable over DCL (RPT24 Rotary Product Trimmer RPT-10001) in view of Cherek (US 5,748,562).

Re claim 34,39, DCL teaches a level probe (section B-B notes) but does not disclose the type of level probe. Cherek teaches a piezoelectric-based vibratory probe for sensing the level of material in a vessel (abstract). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified DCL by Cherek to have the level sensor be a piezoelectric-based vibratory probe for sensing the level of material in a vessel in a conventional way.

Re claim 36,41, DCL teaches a level probe (section B-B notes) but does not disclose the type of mounting. Cherek teaches a piezoelectric-based vibratory probe for sensing the level of material in a vessel (abstract) that is detachably mounted by a setscrew 8 (also unnumbered near item 11). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified DCL by Cherek to have the probe detachably mounted by a setscrew in order to use a known probe attachment method.

Claims 42-47, are rejected under 35 U.S.C. 103(a) as being unpatentable over DCL (RPT24 Rotary Product Trimmer RPT-10001) in view of Krambrock (US 5,660,215) as applied in claim 1 and further in view of Felix (US 3,469,718).

Re claim 42, the DCL reference teaches a bulk material loading device, comprising:

(a) an upper casing assembly (not numbered) having inlet means for receiving a bulk material;

(b) a motor (not numbered) having a shaft and a motor housing (not numbered), wherein said motor housing is mounted to said upper casing assembly outside of said inlet means;

(c) an impeller (trimmer) in rotational communication with said shaft of said motor, wherein said impeller is aligned beneath said inlet means and having a plurality of vanes (blades).

DCL does not appear to teach vanes oriented at a non-zero angle with respect to the vertical. Felix teaches vanes oriented at a non-zero angle with respect to the vertical in order to assure even filling (column 2, line 68). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified DCL by Felix to have vanes oriented at a non-zero angle with respect to the vertical in order to assure even filling.

Re claim 43, DCL does not appear to teach a movable shutter assembly. Krambrock teaches a shutter assembly 3,12, wherein said shutter assembly is movable between a closed position preventing said device from dispersing said bulk material and an open position permitting said device to disperse said bulk material in order to control the dispersal characteristics of the bulk material (column 4, paragraphs 3-4). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified DCL by the general teaching of Krambrock to have a movable shutter assembly in order to control the dispersal properties of the bulk material and also because it is clear form the DCL reference that there is intended to be a way for the material to be stopped and conveyed (high level notes of section B-B). Since DCL's impeller is operatively connected between said motor housing and said upper casing assembly the shutter modification would also be operatively connected between said motor housing and said upper casing assembly.

Re claim 44, the DCL reference teaches level sensing means operatively positioned below said impeller for sensing an accumulation of said bulk material.

Re claims 45, the DCL reference as modified in claim 1 teaches said shutter assembly comprising:

(a) a cylindrical shutter 13 having an upper rim and a lower rim; and

(b) a shutter flange (not numbered) extending radially from said shutter.

Re claims 46, the DCL reference as modified in claim 1 teaches a motor housing including a shutter contact surface formed to contact said shutter assembly in a closed position and retain residual bulk material inside said device.

Re claims 47, the DCL reference as modified in claim 1 teaches said upper casing assembly comprises lifting means operatively in contact with said shutter assembly for at least partially opening said shutter assembly to permit the release of residual bulk material from said device.

Claims 48,49 are rejected under 35 U.S.C. 103(a) as being unpatentable over DCL (RPT24 Rotary Product Trimmer RPT-10001) in view of Krambrock (US 5,660,215), Felix (US 3,469,718) and further in view of Gentilcore (US 5,052,451).

Re claims 48, the modified DCL reference does not teach multiple lifting actuators. Gentilcore teaches a plurality of lifting flanges, and wherein said lifting means comprises a plurality of lifting actuators operatively in contact with lifting flanges 22,26,42, etc., in order to raise or lower a shutter 16. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the DCL reference by the general teaching of Gentilcore to have a plurality of lifting flanges, and

wherein said lifting means comprises a plurality of lifting actuators operatively in contact with lifting flanges in order to raise or lower a heavy shutter in an level manner.

Re claim 49, as modified in reference to claim 6, DCL reference teaches pneumatic lifting actuators.

Conclusion

Applicant's arguments with respect to claims 8 and 26 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments filed 6/20/05 have been fully considered but they are not persuasive.

Applicant argued that the DCL reference does not teach the claimed level sensor limitations. However, the DCL reference teaches this in "Section B-B". At least the lower probe is below a predetermined height of material. Furthermore, the upper probe would need to be at least partially submerged in material (and thus the material would be above the probe) in order to work.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the inlet port, the material exposure of the probes, flow control) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant argued that DCL only has a cage and not a well. However, DCL's "cage" meets the dictionary definition of a "well" and thus reads on this limitation (Merriam-Webster's Collegiate Dictionary 10th edition).

Applicant argued that DCL and Krambrock should not be combined because Krambrock does not have a motor and allegedly because it would require undue experimentation to make the combination work. Krambrock does not need to have a motor since it is only being used for the shutter teaching. Both references deal with material handling and dispersal and as shown above Krambrock provides the teaching for the combination. There would not be undue experimentation needed as it is clear that the shutter could be installed in the same central fashion shown in Krambrock with a hollow shaft or similar other well known techniques.

Applicant argued that Cherek does not teach a setscrew. However, Cherek's setscrew 8 meets the claimed limitations.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Scott Lowe whose telephone number is (571) 272-6929. The examiner can normally be reached on 6:30am-4:30pm M-Th.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen Lillis can be reached on (571) 272-6607. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

msl

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